To: James Cashwell
From: Chris Ricardi
Date: October 22, 2013
Subject: 51 Eames Street Property Slurry Wall Quarterly Monitoring Program 3Q13 – August 2013

DATA VALIDATION REPORT
AUGUST 2013 SLURRY WALL GROUNDWATER AND SURFACE WATER
OLIN CHEMICAL SUPERFUND SITE
WILMINGTON, MASSACHUSETTS

TestAmerica Laboratories Data Sets: 480-44462-1 and 480-44463-1

1.0 INTRODUCTION

Groundwater and surface water samples were collected from the Olin Chemical Superfund Site on August 21 and 22, 2013. Samples were analyzed by TestAmerica Laboratories Inc. in Buffalo, New York. Data were reported in sample delivery groups (SDGs) 480-44462-1 and 480-44463-1. A summary of samples included in this review is contained in Table 1. Samples reviewed in this report were analyzed for the following USEPA SW-846 (USEPA, 1996), USEPA wastewater (USEPA, 1993), or Standard Methods (APHA, 1995):

- Dissolved Metals (aluminum and chromium) by USEPA Method 6010B in groundwater
- Dissolved and Total Metals (aluminum, chromium, and sodium) by USEPA Method 6010B in surface water
- General chemistry analyses for ammonia by USEPA Method 350.1 (Lachat 10-107-06-1B), chloride and sulfate by USEPA Method 300.0, nitrate and nitrite by Method 353.2, and specific conductance by SM 2510B

The Final Interim Response Steps Work Plan (MACTEC, 2007) and the MassDEP Compendium of Quality Assurance and Quality Control Requirements and Performance Standards for Selected Analytical Methods Used in Support of Response Actions for the Massachusetts Contingency Plan (MCP) [MassDEP, 2010] were used as references during the review. Analytical packages were reviewed using the Level 1 Data Quality Evaluation checklists that were developed for the Olin Wilmington monitoring tasks. Final sample results are presented on data summaries in Table 2. No data validation qualification actions were required for the data.

2.0 METALS

Data were reviewed for the following parameters:

* Data Completeness
* Holding Time
* Blanks

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* Laboratory Control Sample / Laboratory Control Sample Duplicate Analysis (LCS/LCSD)
* Matrix Spike / Matrix Spike Duplicate Analysis (groundwater only)
* Detection Limits
* Dissolved vs. Total Metals Comparison (surface water only)

* indicates that criteria were met for this parameter

3.0 GENERAL CHEMISTRY – Ammonia, Chloride, Sulfate, Nitrate, Nitrite, and Specific Conductance

Data were reviewed for the following parameters:

* Data Completeness
* Holding Time
* Blanks
* Laboratory Duplicate Analysis (ammonia and nitrite only)
* LCS/LCSD
* Detection Limits

* indicates that criteria were met for this parameter

Unless discussed above, sample results are interpreted to be usable as reported by TestAmerica.

Chris Ricardi, NRCC-EAC
Senior Chemist

10/22/13
Date

Michael Murphy
Project Principal

10/22/13
Date

References:

American Public Health Association (APHA), 1995. "Standard Methods for Examination of Water and Wastewater"; 19th Edition; APHA, 1015 Fifteenth St., NW. Washington, DC 20005.

MACTEC, 2007. "Final Interim Response Steps Work Plan"; Olin Chemical Superfund Site; 51 Eames Street, Wilmington, Massachusetts; August 8, 2007.

Massachusetts Department of Environmental Protection (MassDEP), 2010. "The Compendium of Quality Assurance and Quality Control Requirements and Performance Standards for Selected Analytical Methods Used in Support of Response Actions for the Massachusetts Contingency Plan (MCP)"; Bureau of Waste Site Cleanup; 1 Winter Street, Boston, Massachusetts 02108; WSC-CAM; July 2010.

U.S. Environmental Protection Agency (USEPA), 1993. "Methods for Chemical Analysis and Water and Wastes (MCAWW)", EPA/600/4-79-020 (March 1983) with updates and supplements EPA/600/4-91-010 (June 1991), EPA/600/R-92-129 (August 1992) and EPA/600/R-93-100 (August 1993).

U.S. Environmental Protection Agency (USEPA), 1996. "Test Methods for Evaluating Solid Waste"; Laboratory Manual Physical/Chemical Methods; Office of Solid Waste and Emergency Response; Washington, DC; SW-846; November 1986; Revision 4 - December 1996.